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You see your doctor, get a prescription, have it filled and take the medicine. Isn't that all you need to know about prescription drugs?

No!

Drugs are powerful chemicals. Along with their benefits, they also have a potential for harm.

Here Are Some Things You Should Know About Prescription Drugs

Adverse Reactions

Some drugs can cause side effects (adverse reactions). Usually these are mild—a slight rash, mild headache, nausea or drowsiness; sometimes they are severe—prolonged vomiting, bleeding, marked weakness or impaired vision or hearing.

These are warning signals that the drug is causing problems. When a reaction is unexpected or severe a doctor should be consulted immediately.

Not everyone reacts the same way to medication. One person may experience a reaction to a certain drug, while another person may have no problems at all.

Drug-Drug Interactions

Two or more drugs, taken at the same time, can interact and affect the way one or the other behaves in the body. For example, an antacid will cause a blood-thinning (anti-coagulant) drug to be absorbed too slowly, while aspirin greatly increases the blood-thinning effect of such drugs.

Two drugs with the same effect when taken together can sometimes have an impact greater than would be expected. This is called potentiation. Potentiation can be helpful, as when the antibiotic trimethoprim is used to boost the effect of another antibiotic, sulfamethoxazole, in combatting certain infections.

Potentiation also can be dangerous, particularly when several central nervous system depressing drugs are involved. Even non-prescription drugs, such as antihistamines that are often used to fight colds, can increase the sedative effects of anesthetics, barbiturates, tranquilizers and some pain-killers.

Food and Drug Interactions

Food can interact with drugs, making them work faster or slower or even preventing them from working at all. Here are some examples:

Fatty foods, eaten before the anti-fungal drug griseofulvin is taken, can cause blood levels of the drug to rise markedly. Calcium in dairy products impairs absorption of tetracycline, a widely used antibiotic. Citrus fruits or juices containing ascorbic acid speeds the absorption of iron from iron supplements. Soda pop, fruit and vegetable juices with high acid contents (such as grape, apple, orange or tomato) cause some drugs to dissolve in the stomach instead of the intestines where they can be more readily absorbed.

Large amounts of liver and leafy vegetables may hinder the effectiveness of anti-coagulants because vitamin K in these foods promotes blood clotting.

The most hazardous food-drug interaction is that of drugs sometimes prescribed for severe depression or high blood pressure and foods containing the substance tyramine. The drugs involved contain monoamine oxidase (MAO) inhibitors. The foods involved include aged cheese, Chianti wine, pickled herring, fermented sausages, yogurt, sour cream, chicken liver, broad beans, canned figs, bananas, avocados and foods prepared with tenderizers. Mixing these foods with an MAO inhibitor drug can raise the blood pressure to dangerous levels.

The food-drug interaction can go the other way. Oral contraceptives, for instance, are known to lower blood levels of folic acid, a member of the vitamin B family, and vitamin B_6 although the depletion is usually not serious enough to cause symptoms. Women who take birth control pills would be wise to include dark green leafy vegetables in their diet.

Chronic use of antacids containing aluminum can cause phosphate depletion, leading to weakness, malaise and loss of appetite.

Drugs and Alcohol

Chronic use of alcohol can cause changes in the liver that speed up the metabolism of some drugs, such as anti-convulsants, anti-coagulants and diabetes drugs. They become less effective because they do not stay in the body long enough.

Prolonged alcohol abuse can also damage the liver so that it is less able to metabolize or process certain drugs. In that case, the drugs stay in the system too long. This is particularly serious when the drugs are phenothiazines (anti-psychotic drugs), which can cause further liver damage.

Alcohol is a central nervous system (CNS) depressant. Alcohol taken along with another CNS depressant drug can affect performance skills, judgment and alertness. If the mixture includes overdoses of barbiturates, diazepam (Valium) or propoxyphene (Darvon), the result can be fatal.

A person who has developed a tolerance to the sedative effects of alcohol may need larger doses of tranquilizers or sleeping pills to get the desired effect. This can lead to an overdose without the person being aware of it.

Similarly, alcoholics and patients with alcohol in their system need larger amounts of anesthetics to induce sleep. Once such a patient is "under," his sleep is deeper and lasts longer.

Drugs and Smoking

Women on birth control pills who smoke have an increased risk of heart attack, stroke and other circulatory diseases.

Nicotine and other tobacco constituents speed up the metabolism of theophylline, an asthma drug, and pentazocine, a pain-killer, and to a lesser extent certain tranquilizers, analgesics and anti-depressants. Thus, smokers may need larger than normal doses of these drugs. When they stop smoking, dosage of these drugs may have to be changed.

Smoking also can affect certain diagnostic tests, such as red and white blood cell counts and blood clotting time determinations.

Drugs and Laboratory Tests

Drugs can affect the results of clinical laboratory tests. For example, excess use of laxatives can affect tests to determine calcium or bone metabolism. Penicillin can result in false readings of protein in the urine, a sign of kidney disease. Large doses of vitamin C can produce false results in a urinary glucose test for diabetes.

What You Should Tell Your Doctor

Because of these side effects and drug interactions, it is important that you tell your doctor if you:

—Have had allergic reactions to drugs or foods, such as rashes or headaches.

—Are taking any medications on a regular basis, such as contraceptives or insulin, or if you use any non-prescription drugs on a routine basis.

—Are being treated for a different condition by another doctor.

—Are pregnant or breast-feeding.

—Have diabetes, kidney or liver disease.

—Are on a special diet or are taking vitamin and mineral supplements.

—Use alcohol or tobacco.

What You Should Ask Your Doctor

To get the most out of your medicine, you should ask your doctor:

—What is the name of the medicine? Write it down so you won't forget.

—What is the medicine supposed to do? (Make the pain go away? Get to the cause of the pain? Reduce fever? Lower blood pressure? Cure infection?)

—What side effects might occur?

—How should you take the medicine? Does "three times a day" mean morning, noon and night? Should you take it before meals, with meals, or after meals? If the directions say "every six hours" do you have to get up during the night to take the medicine on time?

—How long should you take the medicine? If you stop just because you feel good, the symptoms and the disease may recur.

—Are there other medicines you should not take while you are taking this one?

—Are there any foods or beverages you should avoid?

—Should you avoid alcoholic beverages while taking the drug?

—Can the prescription be refilled without an appointment or does the doctor need to see you again?

What's on Your Prescription

The first word on the prescription is the name of the drug. Next is the dosage form (liquid, capsules, tablets) and the strength (such as 250 mg, or milligrams). Next is the amount you will get (15 capsules, 5 fluid ounces), followed by the directions for use. These are often abbreviations of Latin words. For instance, tet in die, written t.i.d., means three times a day. The pharmacist will translate this information on the label of the medicine container. The prescription form will also indicate how many times the prescription can be refilled.

It's a good idea to check the prescription before you leave the doctor's office. If there is anything you don't understand, ask about it.

Information for Patients

Detailed information for patients does not have to accompany most prescription drugs. But for a few, such as contraceptives and estrogens, the Food and Drug Administration does require a leaflet or brochure that tells about the benefits and risks of these products. If there is such a brochure with a drug prescribed for you, be sure to read it carefully and if you have questions, ask your doctor or pharmacist.

Non-prescription drugs must include on their labels information about when and how to take the product, possible side effects or drug interactions. Always read these labels before taking the medicine.

Drug Costs: Brand vs. Generic

When a new drug is discovered it is patented and given a brand, or trade, name. The drug company has exclusive rights to that product for 17 years. When the patent expires, other companies may manufacture that drug under another brand name or under the drug's generic, or common, name. These drugs often are less expensive than the original drug.

Almost all states now permit pharmacists to dispense a generic drug instead of a

brand name product if the doctor approves. However, not all drugs are available from more than one company, and not all multisource drugs are "therapeutically equivalent"—that is, behave in the same way in the body.

FDA publishes lists of drugs that identify which ones can be substituted safely. The next time your doctor writes you a prescription, ask if there is an approved generic version of the drug.

How To Get the Best Results From Rx Drugs

Here are some tips to help you use prescription drugs safely and effectively:
—If a drug is not doing what it is supposed to do for you, check with your doctor. You may need a different dosage or a different drug.
—If you have an unexpected symptom—rash, nausea, dizziness, headache—report it to your doctor immediately.
—Don't stop taking your medicine just because you're feeling better. You may prevent the drug from doing its work completely.
—Check drug labels for specific instructions or warnings, such as "do not take on an empty stomach" or "do not take with milk."
—Check the label, or ask the pharmacist, for storing instructions. Some drugs should be refrigerated; others must be protected from light.
—Always keep medicines out of the reach of children. Even though most prescription medicines come in childproof containers, children sometimes can open these bottles and swallow the contents. (If you have difficulty opening such safety closures, you can request bottles with regular caps.)
—Never let another person use your medicine and never take medicine prescribed for anyone else. Your symptoms may look the same, but you may be suffering from an entirely different problem.

—Never take medicines without checking the label to make sure you're taking the right one. Don't take medicine at night without turning on the light.
—Don't transfer medicines from the original container. These containers are designed to protect the drugs. Fancy pill boxes are not always suitable.
—Do not keep prescription drugs that are no longer needed. Destroy leftover medicines by flushing them down the toilet and dispose of containers carefully so children can't get them.
—Keep a list of all drugs you are taking to show to your doctor and your pharmacist.
—If you are taking several different drugs and have trouble remembering when and how to take them, your pharmacist may be able to provide you with a handy checklist.

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DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Food and Drug Administration
5600 Fishers Lane
Rockville, Md. 20857